Order No. MD0005083C2

Service Manual

FM-LW Digital Clock Radio

RC-Q500

Colour

(S).....Silver Type

EP....East Europe

SPECIFICATIONS

■ RADIO

Frequency Range	
FM	65-108 MHz
LW	148.5-285 kHz
Intermediate Frequency	
LW	459 kHz
FM	10.7 MHz
Sensitivity	
FM	15 dB/50 mW
LW	56 dB/m/50 mW

■ GENERAL

Power requirement	
AC	230 - 240 V, 50 Hz
Power consumption	5 W
Memory back-up battery for clock	9 V (6 F22/6LR61, S-006P)
Power output	300 mW (RMS...Max.)
Speakers	8 cm (16 Ω)
Dimensions (W x H x D)	231 x 60 x 153 mm
Weight	689 g without batteries

Notes:

1. Weight and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

1. Operation Checks and Main Component Replacement Procedures

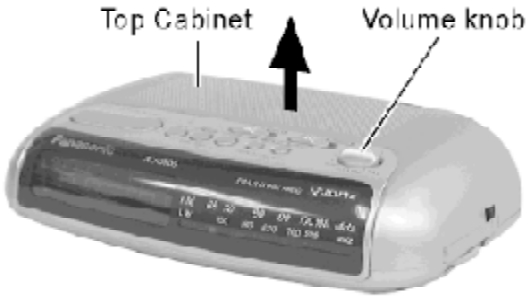
"ATTENTION SERVICER"
Some chassis components maybe have sharp edges. Be careful when diassembling and servicing.

1. **This section describes the procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For assembly after operation checks or replacement, reverse the respective procedures.**
   Special reassembly procedures are described only when required.
3. **Select items from the following index when checks or replacement are requirements.**

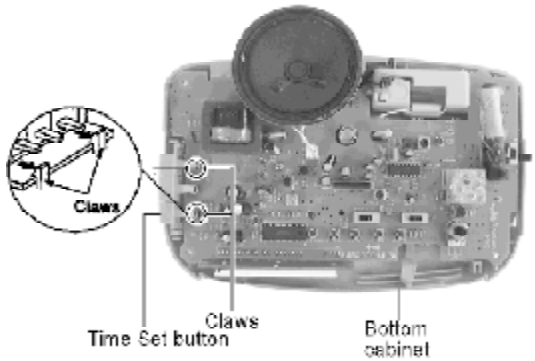
- Checking Procedure for each major P.C.B.
..... P.g. 2
- How to set a dial pointer
..... P.g. 3

1.1. Checking Procedure for each major P.C.B.

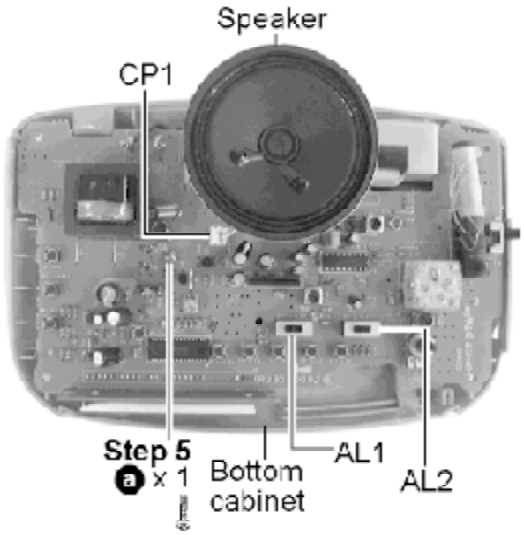
Step 1 Remove 6 screws.



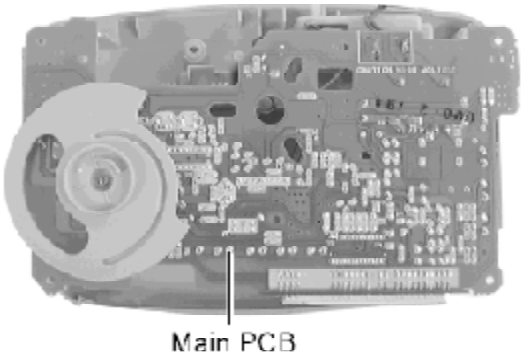
Step 2 Remove the volume knob.
Step 3 Remove the top cabinet in the direction of arrow



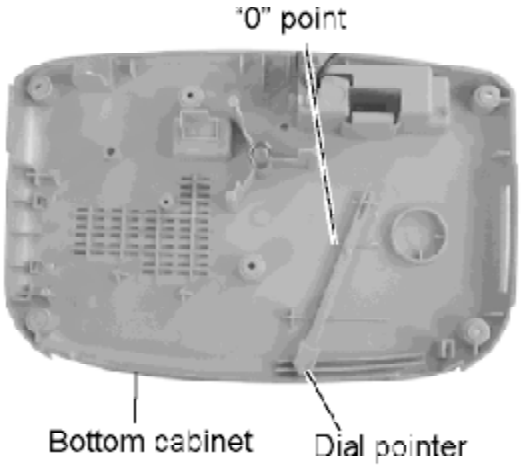
Step 4 Release the 2 claws in the direction of arrow.



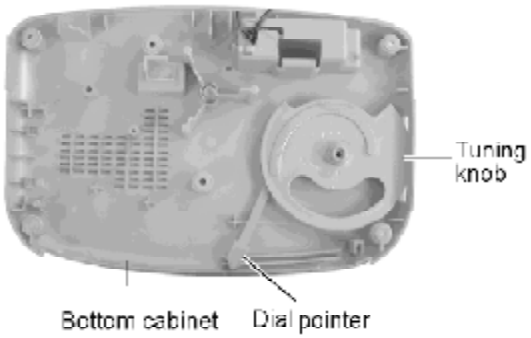
Step 5 Remove CP1 by pressing down the connector.
Note: Please switch AL1 and AL2 to the left side when assemble back the set.



1.2. How to set a dial pointer



Step 1 Install the dial pointer and align the pointer to the "0" point as shown above.



Step 2 Install the tuning knob as shown above.
Note: Turn the tuning knob to the extreme left when installing.

2. Measurements and Adjustments

2.1. ALIGNMENT INSTRUCTIONS

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT
1. Set power source voltage to 230 V AC.
2. Set volume control to maximum.
3. Set band switch to FM or LW.
4. Set mode selector to RADIO.
5. Output of signal generator should be no higher than necessary to obtain an output reading.

- AM-IF ALIGNMENT

Signal Generator or Sweep Generator		Radio Dial Setting	Indicator (Electronic Voltmeter or oscilloscope)	Adjustment (Shown in Fig.1)	R
Connections	Frequency				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	455 kHz 30% Mod. at 400 Hz	Point of non-interference. (on/ about 150 kHz)	Connect vert. amp. of scope to test point TP3. Negative side to test point TP2.	T51 (LW IFT)	Adj ma: out

- LW-RF ALIGNMENT

Signal Generator or Sweep Generator		Radio Dial Setting	Indicator (Electronic Voltmeter or oscilloscope)	Adjustment (Shown in Fig.1)	R
Connections	Frequency				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	136 kHz	Tuning capacitor fully closed.	Connect vert. amp. of scope to test point TP3. Negative side to test point TP2.	L54 (LW OSC Coil)	Adju maxi outp
	297 kHz	Tuning capacitor fully opened.		CT1 (LW OSC Trimmer)	
	136 kHz	Tune to signal		[*1] L55 (LW ANT Coil)	Adju maxi outp by L mov alon ferrit
	297 kHz			CT2 (LW ANT Trimmer)	Adju maxi outp
[*1] Fix antenna coil with wax after completing alignment					

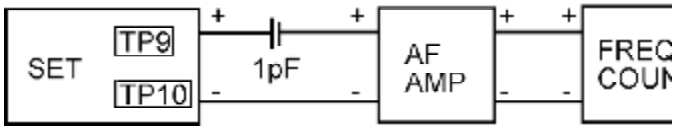
- FM-IF ALIGNMENT

Signal Generator or Sweep Generator		Radio Dial Setting	Indicator (Electronic Voltmeter or oscilloscope)	Adjustment(Shown in Fig.1)	F
Connections	Frequency				
Connect to test point TP3 through ceramic capacitor. Negative side to test point TP2.	10.7 MHz (Sweep)	Point of non-interference. (on/about 90 MHz)	Connect vert. amp. of scope to test point TP3. Negative side to test point TP2.	T50 (FM 1st)	Wa sho Fig
				T52 (FM 2nd)	Wa sho Fig
[*2] Two output responses will be present; proper tuning is the center frequency.					

- FM-RF ALIGNMENT

Signal Generator or Sweep Generator		Radio Dial Setting	Indicator (Electronic Voltmeter or oscilloscope)	Adjustment(Shown in Fig.1)	F
Connections	Frequency				
Connect to test point TP18 through FM dummy antenna. Negative side to test point TP2.	63.7 MHz	Variable capacitor fully closed.	Connect vert. amp. of scope to test point TP3. Negative side to test point TP2.	L53 (FM OSC Coil)	[*2] for out
	109.2 MHz	Variable capacitor fully opened.		CT50-1 (FM OSC Trimmer)	
	104 MHz	Tune to signal.		CT50-2 (FM ANT Trimmer)	
[*2] Three output response will be present; proper tuning is the outer frequency.					

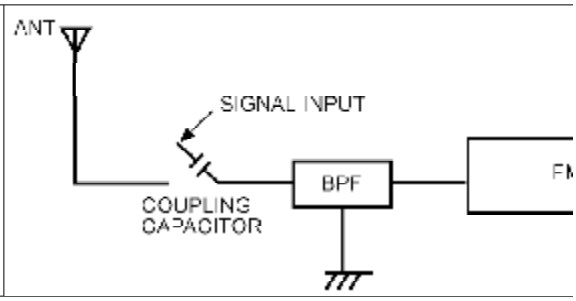
- BATTERY BACK-UP CIRCUIT ADJUSTMENT (NOTE: Disconnect AC power cord)

DC Power Supply		Frequency Counter	Adjustment Point	Remarks
Connections	Voltage			
(+) Side...TP5 (-) Side...TP4	9 V	(+) Side...TP9 (-) Side...TP10	VR1	Adjust VR3 for 2400 ± 15 Hz on freque counter reading. [*3, 4, 5]
[*3] Connect 1 pF capacitor to the test point TP9. [*4] Amplify its output signal by using AF Amp. [*5] Measure the frequency.				

- FM DATA MEASUREMENT

Note: The FM IC (Mixer) has to be isolated from the antenna when doing FM measurement.

1. De-soldered one connection of coupling capacitor that is connected to the antenna
2. Input the signal directly to the coupling capacitor.
3. Solder back the capacitor after the data has been taken



2.2. Alignment Points

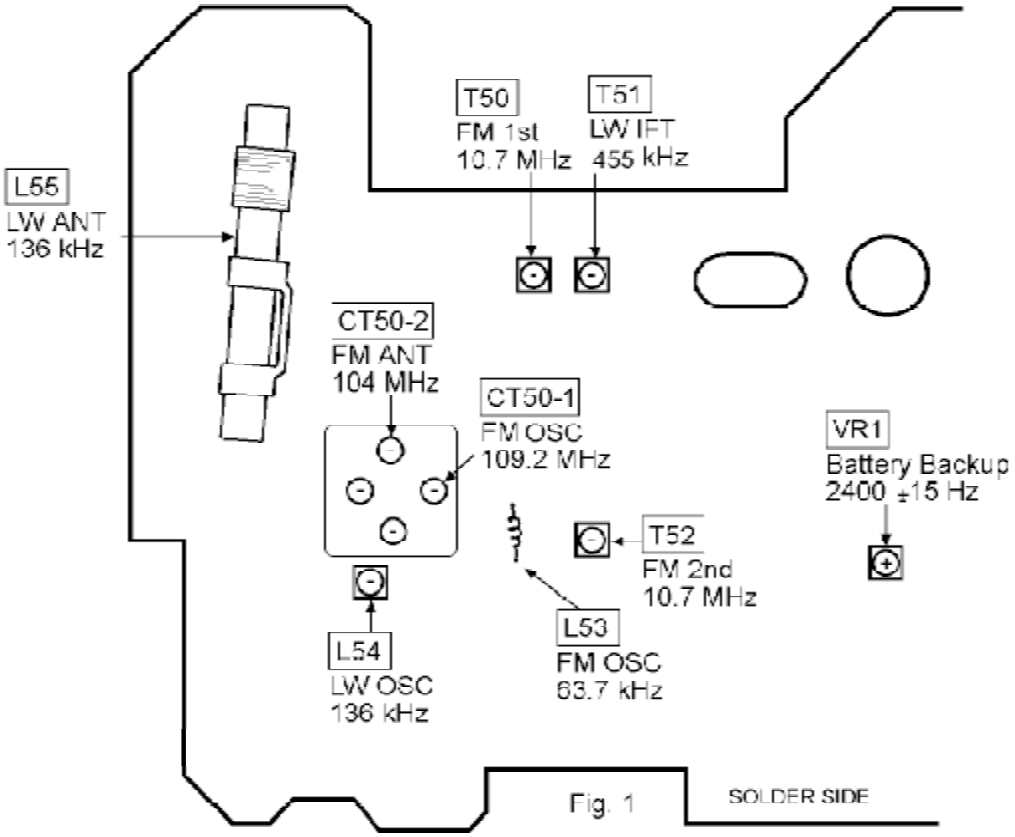


Fig. 1

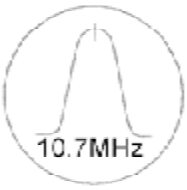
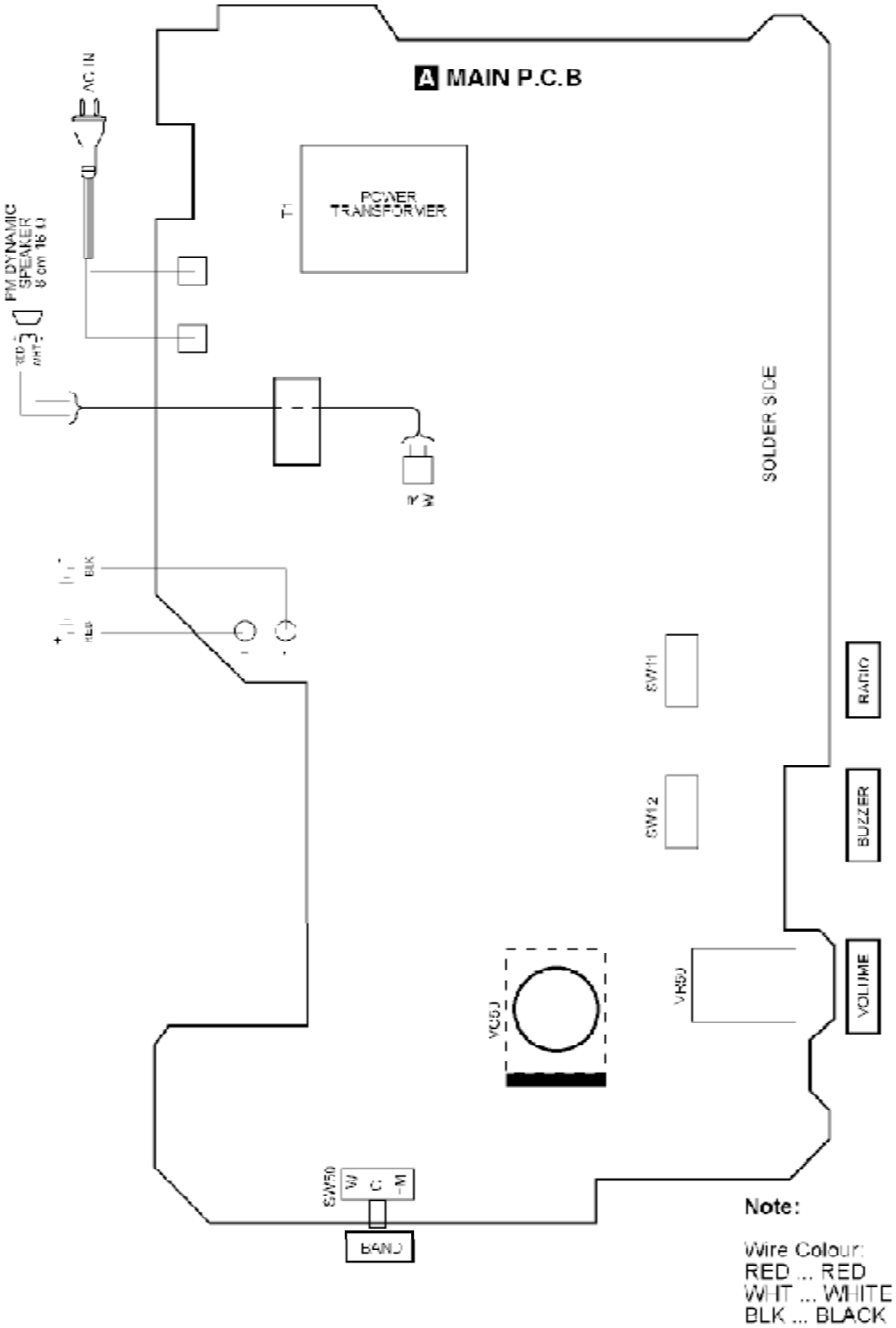


Fig. 2

Fig. 3

3. Type Illustration of IC's, Transistors and Diodes

4. Wiring Connection Diagram



5. Terminal Functions of ICs

- IC1 (LM8652) Clock LSI

Pin No.	Mark	I/O	Function
1~13	Segment signal output	O	Output terminals for segment drive signals
14	Colon output	—	Not used
15	Vss	I	Power supply input
16	CR OSC	O	Outputs an oscillating signal source necessary for the time base during back-up operation and operates the time counter. Also functions as an alarm tone signal (OSC frequency = 2.4 kHz)
17	SPEED/ POWER	I	Vss for AC operation.
18	DC OUTPUT	O	When radio on signal is received or generates at IC1, this pin will send a high signal to the radio +B voltage control circuit (Q1).
19,20	19...ALARM1 OUTPUT 20...ALARM2 OUTPUT	O	Outputs an alarm signal (“H” level) when alarm time matches the current time. When this pin is momentarily grounded (VDD) the alarm output stops.
21	ALARM DISPLAY	I	When a high signal is applied to this pin, the contents of alarm 2 is displayed and the setting input is enabled. When a low signal is applied, the above applies instead to alarm 1.
22	TIME SET INPUT	I	Applying a signal to this pin causes the value of the current time of alarm time to increment. If the input voltage is Vss, the time decreases. If the input voltage is VDD, the time increases. If the input voltage is a pulse signal(caused by depressing the switched S10), the speed increases.

Pin No.	Mark	I/O	Function
23	ON/OFF	I	By turning on S5, the input is VSS (high signal) and the mode switches to Radio on mode. By turning on S4, the input is VDD (low signal) and the mode is now switch to the Radio off mode.
24	SLEEP/DOZE	I	By turning on S3, the input is VSS (high level) and the mode switches to sleep mode. By turning on S2, the input is VDD (low signal) and the mode is now switch to the doze mode.
25	50/60 Hz INPUT	I	Input terminal for noise filter circuit.
26	MODE	I	Terminal to input mode selection VDD:12-hour, 60 HzOPEN:12-hour, 50 Hz VSS: 24-hour, 50 Hz
27	TIME SET	I	Input terminal for time setting and dinner adjustment modes. VSS: Dimmer (Timer lock) OPEN: Bright (Time lock) VDD : bright (Time set)
28	VDD	—	Ground terminal.

6. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology.)
Notes:

SW2:	**DOZE SWITCH**
SW3:	**SLEEP SWITCH**
SW4:	**POWER/TIME SET SWITCH**
SW5:	**RADIO ON SWITCH**
SW6:	**ALARM 1 DISPLAY SWITCH**
SW7:	**ALARM 2 DISPLAY SWITCH**
SW8:	**TIME SET FWD SWITCH**
SW9:	**TIME REVERSE SWITCH**
SW10:	**TIME SET FAST SWITCH**
SW11:	**RADIO/OFF SWITCH**
SW12:	**BUZZER/OFF SWITCH**
SW50:	**BAND FM/LW SWITCH**
VR50:	**VOLUME CONTROL VR**

Battery current: /

- Volume minimum
24.2 mA (Radio)

- Volume maximum
30.9 mA (Radio)

Measurement Instruction:

RADIO: AM - 74 dB/m, 30% Mod; FM - 60 dB/m, 30% Mod.

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

< > : FM No Mark : Clock

- Importance safety notice:
Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistor), high-quality sound (capacitors), low-noise (resistor), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list. /

Caution !

IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.

- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

7. Printed Circuit Board

(This printed circuit board diagram may be modified at any time with the development of new technology.)

8. Parts Location and Replacement Parts List

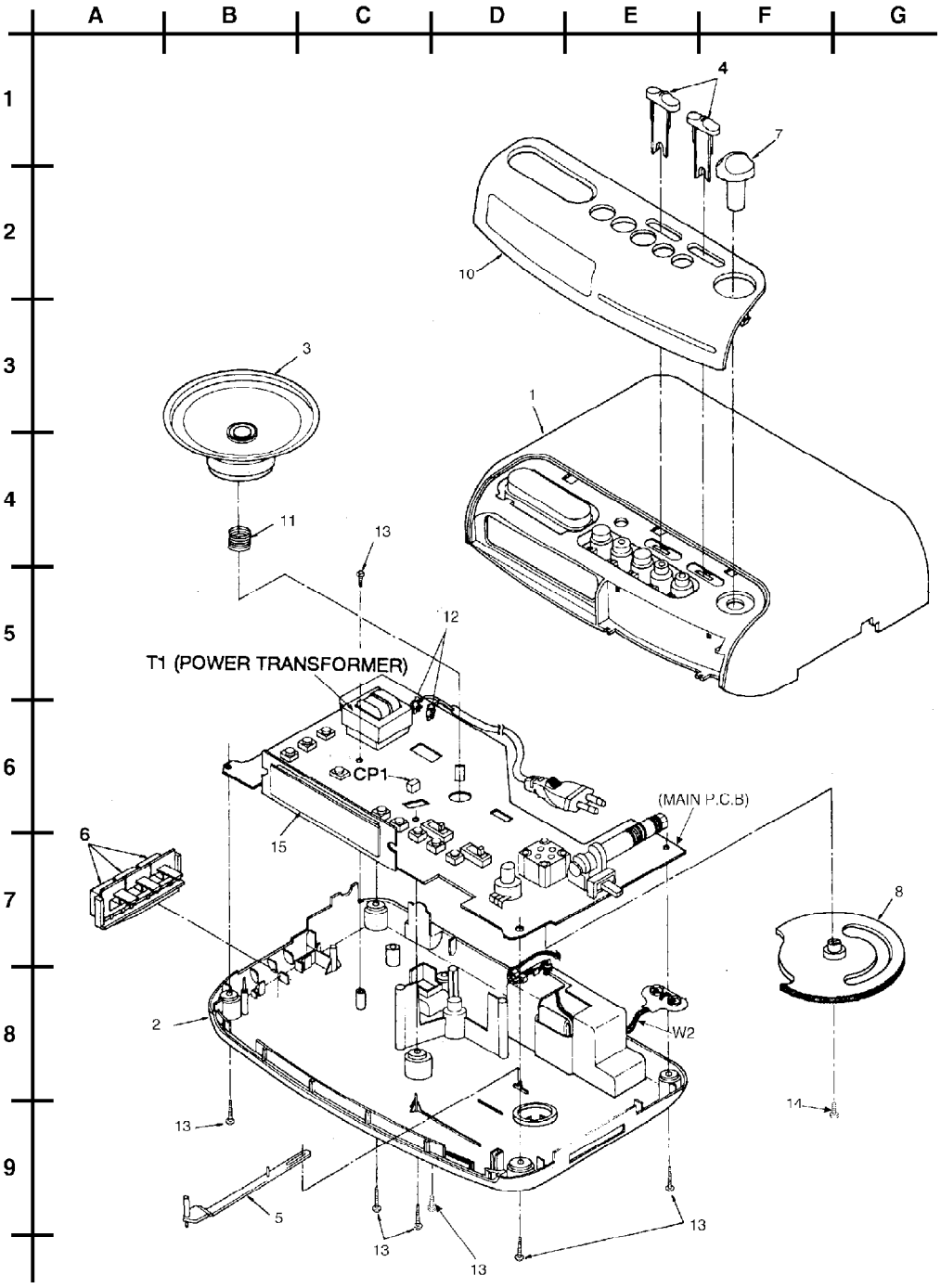
Note:

- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purpose of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
  When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)
  Parts without these indications can be used for all areas.
- Capacitor values are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- Resistance value are in ohms, unless specified otherwise, 1K= 1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by MESA.
- The "(SF)" mark denotes the standard part.
- Reference for O/I book languages are as follows:

Ar	: Arabic	Cf	: Canadian French	Cz	: Czech	Da	: Danish
Du	: Dutch	En	: English	Fr	: French	Ge	: German
It	: Italian	Ko	: Korean	Po	: Polish	Ru	: Russian
Sp	: Spanish	Sw	: Swedish	Co	: Traditional Chinese	Cn	: Simplified Ch

8.1. Cabinet

8.1.1. Cabinet Parts Location



8.1.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RKMX0004D-S	TOP CABINET	[M]
2	RKSX0004V-S	BOTTOM CABINET	[M]
3	RAS8P03-U	SPEAKER	[M]
4	RGBX0005-S	SLIDE KNOB	[M]
5	RGJX0004-D	POINTER	[M]
6	RGUX0011-H	TIME SET BUTTON	[M]
7	RGWX0006-S	VOLUME KNOB	[M]
8	RGXX0005-H	TUNING KNOB	[M]
10	RKWW0004F-S	DIAL SCALE PANEL	[M]
11	RUQ50ZA	SPEAKER SPRING	[M]
12	SJT777	TERMINAL LUG	[M]
13	XTV3+12G	SCREW	[M]
14	XYN26+C8	SCREW	[M]
15	4HCR21532	LED DISPLAY	[M]

8.2. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		P.C.B.	
	REPT0006A	MAIN P.C.B.	[M]
		INTEGRATED CIRCUITS	
IC1	LM8562	IC CLOCK LSI	[M]
IC50	TA8164P	IC TUNER	[M]
IC51	TA7368P	IC POWER AMP	[M] ⚠
IC100	TC74HC4060AP	IC COUNTER/OSC	[M]
		TRANSISTORS	
Q1	2SD734FAA	TRANSISTOR	[M] ⚠
Q2	2SC4641TAA	TRANSISTOR	[M] ⚠
Q4	2SD734FAA	TRANSISTOR	[M] ⚠
Q101	2SC4641TAA	TRANSISTOR	[M] ⚠
Q102	2SC4641TAA	TRANSISTOR	[M] ⚠
Q103	2SC4641TAA	TRANSISTOR	[M] ⚠
Q104	2SC4641TAA	TRANSISTOR	[M] ⚠
		DIODES	
D1	RVD1SR35TR	DIODE	[M]
D2	RVD1SR35TR	DIODE	[M]
D3	RVD1SR35TR	DIODE	[M]
D4	RVDMTZ10BTA	DIODE	[M]
D5	RVD1SS133TA	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D6	RVD1SS133TA	DIODE	[M]
D7	RVD1SS133TA	DIODE	[M]
D8	RVD1SS133TA	DIODE	[M]
D9	RVD1SS133TA	DIODE	[M]
D10	RVDMTZ6R8BTA	DIODE	[M]
D11	RVD1SS133TA	DIODE	[M]
D51	SVC251SPA-AC	DIODE	[M]
D101	RVDMTZ5R1BTA	DIODE	[M]
		VARIABLE RESISTORS	
VR1	QVNB3A00B224	VARIABLE RESISTOR	[M]
VR50	EVJF8AF20A14	VARIABLE RESISTOR	[M]
		VARIABLE CAPACITOR	
VC50	RCV4RDT0V-R	VARIABLE CAPACITOR	[M]
		SWITCHES	
SW2	EVQ21405R	SW DOZE	[M]
SW3	EVQ21405R	SW SLEEP	[M]
SW4	EVQ21405R	SW POWER/TIME SET	[M]
SW5	EVQ21405R	SW RADIO ON	[M]
SW6	EVQ21405R	SW ALARM 1 DISP/ADJ	[M]
SW7	EVQ21405R	SW ALARM 2 DISP/ADJ	[M]
SW8	EVQ21405R	SW TIME SET FWD	[M]
SW9	EVQ21405R	SW TIME SET REV	[M]
SW10	EVQ21405R	SW TIME SET FAST	[M]
SW11	RSS2B035-B	SW ALARM 1	[M]
SW12	RSS2B035-B	SW ALARM 2	[M]
SW50	RSS2B019-B	SW BAND	[M]
		CONNECTOR	
CP1	RJS2T5ZA	CONNECTOR	[M]
		COILS & TRANSFORMERS	
L51	RLQY30S1W-F	FM COIL	[M]
L53	RLD4Y54W-F	FM OSC COIL	[M]
L54	RL02B018-T	AM OSC COIL	[M]
L55	RLV1C001-0	LW BAR ANT COIL	[M]
T1	RTP1I2B003-G	TRANSFORMER	[M] ⚠
T50	RLI4B153-T	TRANSFORMER	[M] ⚠
T51	RLI2B009-T	TRANSFORMER	[M] ⚠
T52	RLI4B153-T	TRANSFORMER	[M] ⚠
		CERAMIC FILTERS	
CF50	RLFCCFA459	CERAMIC FILTER	[M]
CF51	RLFFEHWN02ZT	CERAMIC FILTER	[M]
CX1	RSXD51K2S01	CRYSTAL	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		WIRES	
W2	**RJC99029**	**WIRE**	**[M]**
		RESISTORS	
R1	**ERDS2TJ122T**	**1.2K 1/4W**	**[M]**
R2	**ERDS2TJ472T**	**4.7K 1/4W**	**[M]**
R3	**ERDS2TJ222T**	**2.2K 1/4W**	**[M]**
R4	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R5	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R6	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R7	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R8	**ERDS2TJ683T**	**68K 1/4W**	**[M]**
R9	**ERDS2TJ562T**	**5.6K 1/4W**	**[M]**
R11	**ERDS2TJ330T**	**33 1/4W**	**[M]**
R12	**ERDS2TJ560T**	**56 1/4W**	**[M]**
R13	**ERDS2TJ560T**	**56 1/4W**	**[M]**
R14	**ERDS2TJ562T**	**5.6K 1/4W**	**[M]**
R15	**ERDS2TJ222T**	**2.2K 1/4W**	**[M]**
R16	**ERDS2TJ183T**	**18K 1/4W**	**[M]**
R17	**ERDS2TJ395T**	**3.9M 1/4W**	**[M]**
R18	**ERDS2TJ223T**	**22K 1/4W**	**[M]**
R19	**ERDS2TJ560T**	**56 1/4W**	**[M]**
R20	**ERDS2TJ334T**	**330K 1/4W**	**[M]**
R50	**ERDS2TJ270T**	**27 1/4W**	**[M]**
R51	**ERDS2TJ392T**	**3.9K 1/4W**	**[M]**
R52	**ERDS2TJ563T**	**56K 1/4W**	**[M]**
R53	**ERDS2TJ223T**	**22K 1/4W**	**[M]**
R54	**ERDS2TJ102T**	**1K 1/4W**	**[M]**
R55	**ERDS2TJ104T**	**100K 1/4W**	**[M]**
R56	**ERDS2TJ151T**	**150 1/4W**	**[M]**
R57	**ERDS2TJ101T**	**100 1/4W**	**[M]**
R58	**ERDS2TJ104T**	**100K 1/4W**	**[M]**
R59	**ERDS2TJ820T**	**82 1/4W**	**[M]**
R60	**ERDS2TJ102T**	**1K 1/4W**	**[M]**
R101	**ERDS2TJ102T**	**1K 1/4W**	**[M]**
R102	**ERDS2TJ222T**	**2.2K 1/4W**	**[M]**
R103	**ERDS2TJ683T**	**68K 1/4W**	**[M]**
R104	**ERDS2TJ472T**	**4.7K 1/4W**	**[M]**
R105	**ERDS2TJ223T**	**22K 1/4W**	**[M]**
R106	**ERDS2TJ330T**	**33 1/4W**	**[M]**
R107	**ERDS2TJ223T**	**22K 1/4W**	**[M]**
R108	**ERDS2TJ330T**	**33 1/4W**	**[M]**
R109	**ERDS2TJ103T**	**10K 1/4W**	**[M]**
R110	**ERDS2TJ106T**	**10M 1/4W**	**[M]**
R111	**ERDS2TJ474T**	**470K 1/4W**	**[M]**
R112	**ERDS2TJ101T**	**100 1/4W**	**[M]**
		CAPACITORS	
C1	**ECKR1H103ZF5**	**0.01 50V**	**[M]**
C2	**ECKR1H103ZF5**	**0.01 50V**	**[M]**

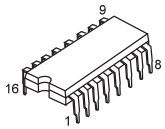
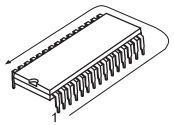
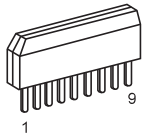
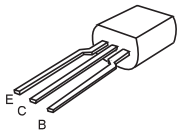
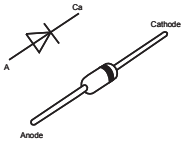
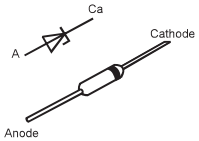
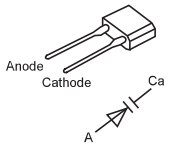
Ref. No.	Part No.	Part Name & Description	Remarks
C3	ECKR1H103ZF5	0.01 50V	[M]
C4	ECEA0JU102B	1000P 6.3V	[M]
C5	ECEA1EU101B	100 25V	[M]
C6	ECEA1CU330B	33 16V	[M]
C7	ECEA1CU102E	1000P 16V	[M]
C8	ECEA1CU221B	220 16V	[M]
C9	ECBT1H102KB5	1000P 50V	[M]
C10	ECBT1H102KB5	1000P 50V	[M]
C11	ECBT1C472MR5	4700P 16V	[M]
C12	ECBT1C472MR5	4700P 16V	[M]
C14	ECBT1E223ZF5	0.022 25V	[M]
C15	ECEA1AU470B	47 10V	[M]
C16	ECBT1C103NS5	0.01 16V	[M]
C17	ECBT1H102KB5	1000P 50V	[M]
C18	ECBT1C103NS5	0.01 16V	[M]
C19	ECBT1C103NS5	0.01 16V	[M]
C20	ECQG1H152KZT	1500P 50V	[M]
C21	ECBT1H102KB5	1000P 50V	[M]
C22	ECEA1HU0R1B	0.1 50V	[M]
C50	ECBT1H220J5	22 50V	[M]
C51	ECBT1H390J5	39 50V	[M]
C52	ECBT1H180JC5	18 50V	[M]
C53	ECCR1H050DC5	5 50V	[M]
C54	ECCR1H080DC5	8 50V	[M]
C55	ECCR1H040CC5	4 50V	[M]
C56	ECFR1C473MR	0.047 16V	[M]
C57	ECBT1C122MR5	1200P 16V	[M]
C58	ECBT1H180JC5	18 50V	[M]
C59	ECBT1C472MR5	4700P 16V	[M]
C60	ECKR1H151KB5	150 50V	[M]
C61	ECEA1CU330B	33 16V	[M]
C62	ECBT1C122MR5	1200P 16V	[M]
C63	ECEA0JU101B	100 6.3V	[M]
C64	ECBT1C103NS5	0.01 16V	[M]
C65	ECEA1HU0R1B	0.1 50V	[M]
C66	ECBT1H102KB5	1000P 50V	[M]
C67	ECEA1AU470B	47 10V	[M]
C68	ECEA1AU470B	47 10V	[M]
C69	ECEA0JU221B	220 6.3V	[M]
C70	ECEA0JU221B	220 6.3V	[M]
C71	ECQP2A221JZT	220 100V	[M]
C72	ECBT1H240J5	24 50V	[M]
C73	ECBT1H560J5	56 50V	[M]
C81	ECBT1H391KB5	390 50V	[M]
C82	ECBT1H102KB5	1000P 50V	[M]
C83	ECBT1H221KB5	220 50V	[M]
C84	ECBT1C122MR5	1200P 16V	[M]
C85	ECBT1H221KB5	220 50V	[M]
C101	ECEA0JU101B	100 6.3V	[M]
C102	ECBT1C122MR5	1200P 16V	[M]
C103	ECBT1E223ZF5	0.022 25V	[M]
C104	ECBT1H220J5	22 50V	[M]
C105	ECBT1H220J5	22 50V	[M]
C106	ECBT1C122MR5	1200P 16V	[M]

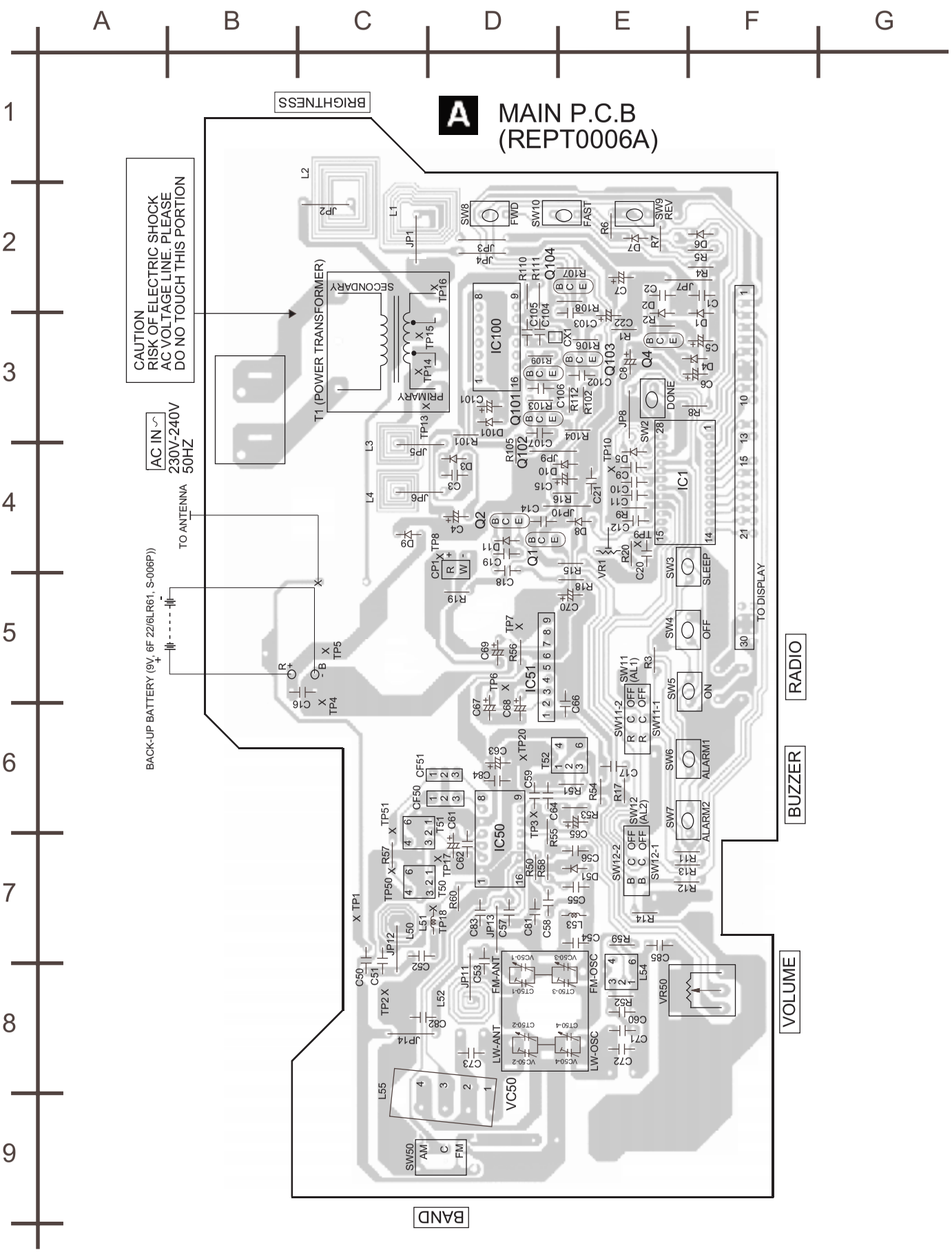
Ref. No.	Part No.	Part Name & Description	Remarks
C107	ECBT1C122MR5	1200P 16V	[M]

8.3. Packing Materials & Accessories Parts List

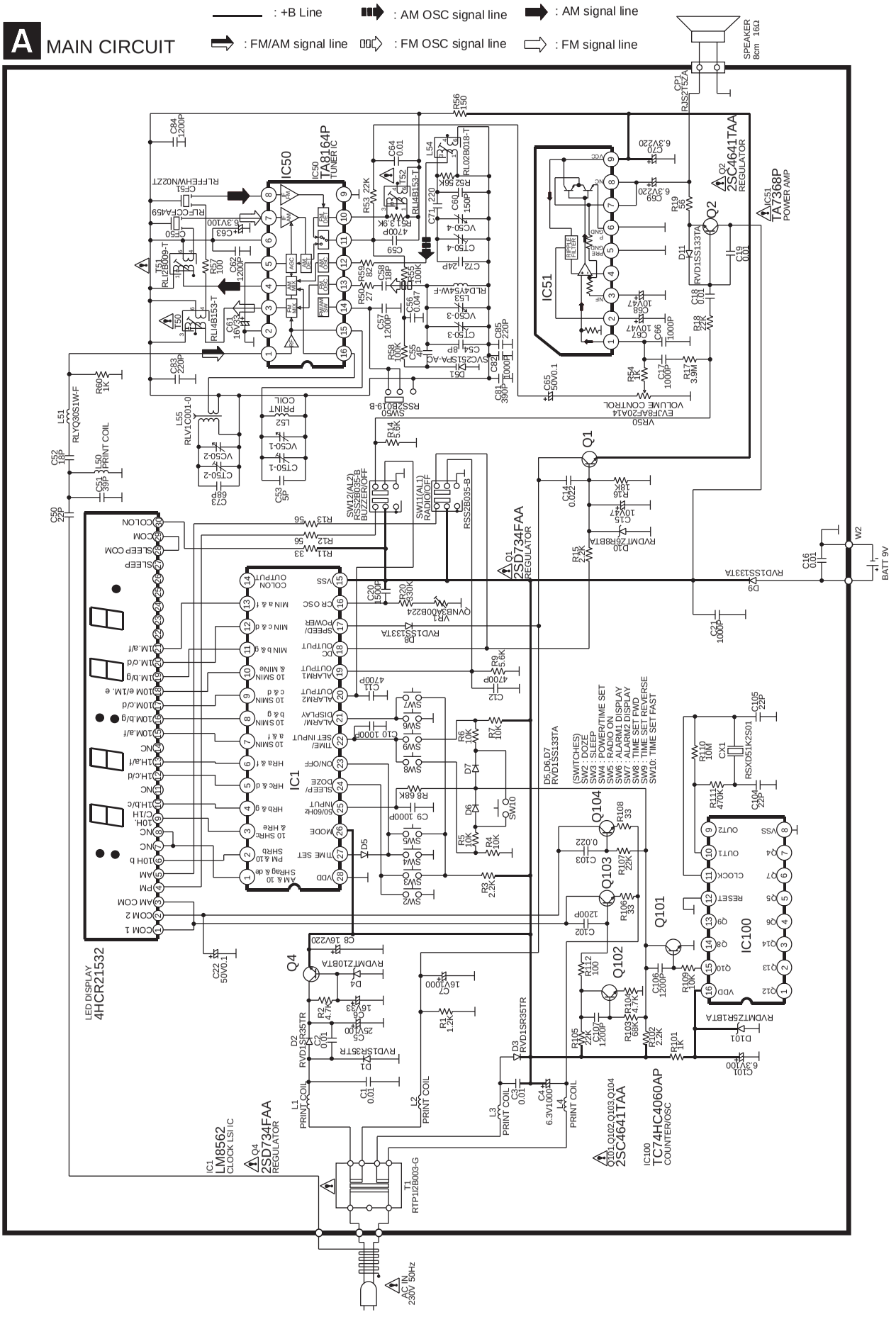
Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPK1385	GIFT BOX	[M]
P2	RPHW0001	PROTECTIVE PAD	[M]
P3	XZB30X25A04	MIRAMAT	[M]
		ACCESSORIES	
A1	RJA23YB-U	AC CORD	[M]
A2	RQTT0249-2E	O/I BOOK	[M]

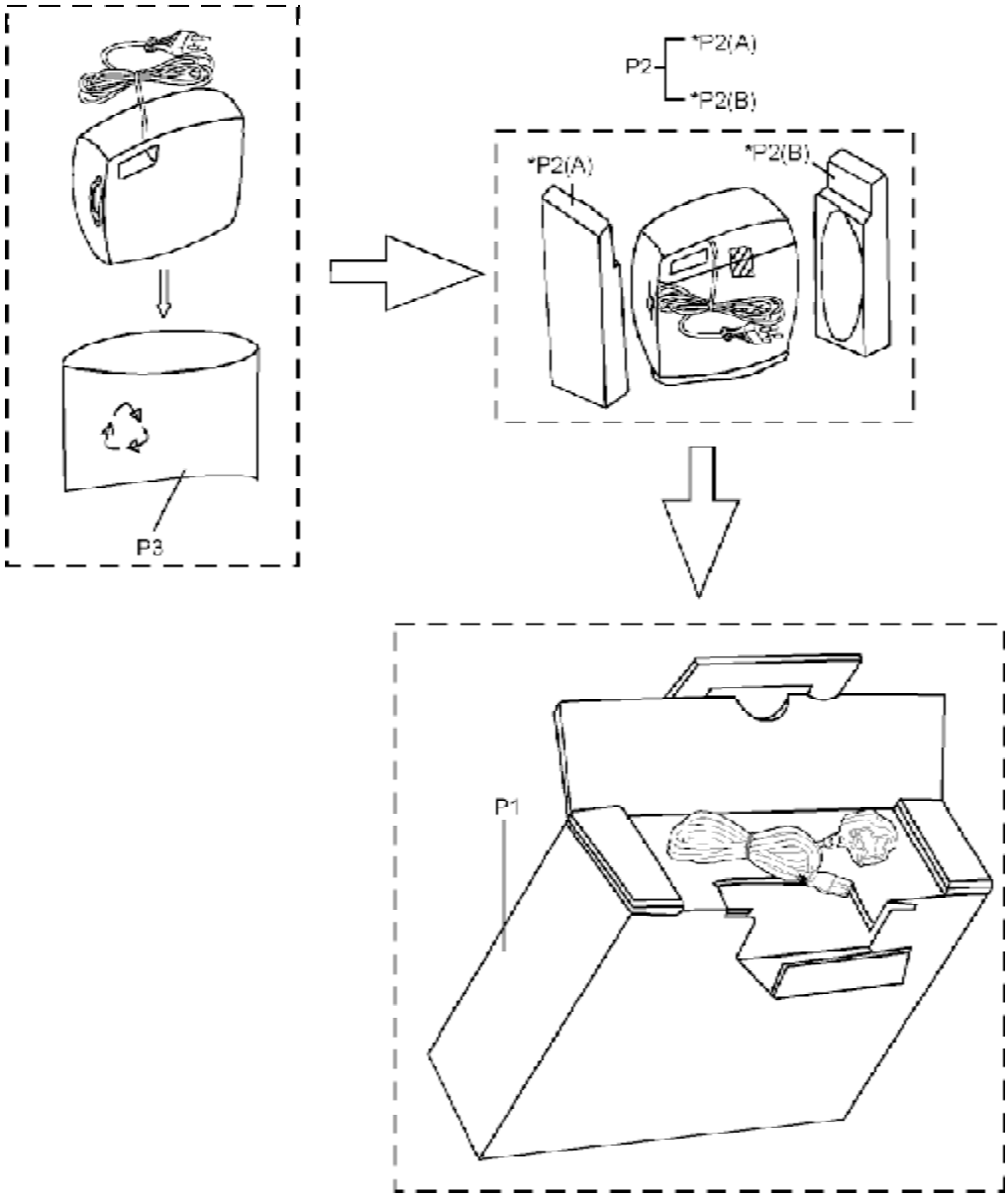
8.4. Packaging

LM8562 	TA8164P TC74HC4060AP 	TA7368P 	2SD734FAA 2SC4641TAA 	RVD1SS133TA RVD1SR35TR 	RVDMTZ10BTA RVDMTZ5R1BTA RVDTZ6R8BTA 
SVC251SPA-AC 					


A
MAIN P.C.B
(REPT0006A)
BRIGHTNESS
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE
DO NO TOUCH THIS PORTION
AC IN
230V-240V
50HZ
TO ANTENNA
BACK-UP BATTERY (9V, 6F 22/6LR61, S-006P))
T1 (POWER TRANSFORMER)
SECONDARY
PRIMARY
IC100
IC1
IC50
IC51
Q101
Q102
Q103
Q104
Q1
Q2
Q4
VC50
VR50
VR1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
SW9
SW10
SW11
SW12
SW50
SLEEP
OFF
ON
ALARM1
ALARM2
FWD
REV
FAST
DONE
TO DISPLAY
RADIO
BUZZER
VOLUME
BAND

A MAIN CIRCUIT





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